

SUBSTITUTE NAMES FOR THE EXTINCT GENERA
CYCLOPTERA MARTYNOVA (MECOPTERA)
AND *PAELCANA* CARPENTER (ORTHOPTERA)*

BY FRANK M. CARPENTER
Museum of Comparative Zoology
Harvard University, Cambridge, Mass. 02138

In 1958 Dr. Olga M. Martynova described a fossil mecopteran belonging to a new genus, *Cycloptera*, and representing a new family, Cyclopteridae. Since the name *Cycloptera* turns out to be preoccupied, a substitute name is needed. Dr. Martynova has asked me to propose a replacement name, and, following her suggestion for the name, I propose the following:

Cyclopterina, *nomen novum*, pro *Cycloptera* Martynova, 1958, p. 85, non Audinet-Serville, 1839, p. 439. The type species, *Cycloptera autumnale* Martynova, 1958, original designation, becomes *Cyclopterina autumnalis* (Martynova), new combination. The new generic name is derived from *Cycloptera* with the addition of the feminine suffix *-ina* and is considered feminine. The genus is known only from the Permian of the Kuznetz Basin, near the Tom River, Kemerovsk Region, USSR.

The family name, Cyclopteridae Martynova, 1938, p. 84, is herein replaced by Cyclopterinidae. *Cyclopterina* is the only genus known in the family at present.

In 1966 I described a Permian orthopter, placing it in a new genus, *Paelcana*, of a new family, Paelcanidae. I have only recently realized that the name *Paelcana* is preoccupied and I take this opportunity to propose the following substitute name:

Anelcana, *nomen novum* pro *Paelcana* Carpenter, 1966, p. 84, non Handlirsch, 1906, p. 420. The type species, *Paelcana dilatata* Carpenter, 1966, original designation, becomes *Anelcana dilatata* (Carpenter), new combination. The new generic name is derived from *Elcana* with the prefix *an* ("not"). The genus is known only from the Permian of Kansas, U.S.A.

*Research supported by National Science Foundation grant DEB 8205398, F. M. Carpenter, Principal Investigator.

The family name, Parelcanidae Carpenter, is herein replaced by Anelcanidae. The genus *Petrelcana* Carpenter (1966), from the same locality, is the only other genus in the family.

REFERENCES

AUDENIT-SERVILLE, J. G.

1839. Histoire naturelle des insectes, Orthoptères. Paris Librairie Encyclopédique de Roret, p. 1-776, pl. 1-14.

CARPENTER, F. M.

1966. The Lower Permian insects of Kansas. Part 11. The orders Protorthoptera and Orthoptera. *Psyche*, 73: 48-88, Pl. 4-7, text-fig. 1-20.

HANDLIRSCH, ANTON

1906. Die fossilen Insekten und die Phylogenie der rezenten Formen. P. 1-640, pl. 1-26, Engelmann (Leipzig).

MARTYNOVA, O. M.

1958. Novye nassekomye ix permskikh i mezozojskikh ot lozsgenij SSSR. Materialy k Osnovam Paleontologii, 2: 69-94, text-fig. 1-23.